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426prus Cooperative
Monitoring
1985 Arrangement ...
4th yr data exchange,
United States
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POPLAR RIVER COOPERATIVE MONITORING ARRANGEMENT

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FOURTH QUARTER DATA EXCHANGE UNITED STATES CONTRIBUTION

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INTRODUCTION

1985 - FOURTH QUARTER DATA EXCHANGE POPLAR RIVER BASIN

The Poplar River Bilateral Monitoring Committee was authorized by the Governments of Canada and the United States under the Poplar River Cooperative Monitoring Arrangement dated September 23, 1980. The Committee is composed of representatives of the Governments of the United States, State of Montana, Canada, and Province of Saskatchewan. In addition to the representatives of governments, two ex officio members who are local representative of the State of Montana and Province of Saskatchewan participate in activities of the Committee.

One responsibility of the Committee includes the on-going quarterly exchange of results of water quantity, water quality and air quality monitoring programs. The programs are being conducted in Canada and the United States at or near the International Boundary by cooperative monitoring agencies in accordance with the Technical Monitoring Schedules. Monitoring information is to be transmitted by each Committee co-chairman to his counterpart co-chairman within a reasonable period after the termination of each quarter. In addition, pre selected parties are to receive copies of the quarterly exchange.

This package represents information collected by United States sources for the Poplar River basin during the fourth quarter of 1985. Included are data for surface water quantity and quality, ground water levels. Air quality monitoring was not done during the reporting period.

STREAMFLOW MONITORING

Responsible Agency: U.S. Geological Survey

Daily mean discharge or levels and instantaneous monthly extremes as normally published in surface water data publications.

<u>No. on Map</u>	<u>USGS Station No.</u>	<u>Station Name</u>
1	06178000	Poplar River at International Boundary

Responsible Agency: Environment Canada

2	06178500	East Poplar River at International Boundary
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HYDROMETRIC GAUGING STATIONS



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POPLAR RIVER BASIN

OBJECT: POPULAR RIVER AT INTERNATIONAL POINT

DESIGN: 15 CUBIC FEET PER SECOND CALENDAR YEAR 1950
MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			60	22	9.2	15	.14	.06	.03	2.0		
2			50	22	8.7	16	.13	.06	.03	2.1		
3			30	23	8.0	13	.13	.08	.03	3.0		
4			15	21	8.1	11	.17	.07	.03	4.6		
5			8.0	31	6.9	9.8	.10	.05	.05	4.4		
6			4.0	37	5.9	8.4	.11	.04	.05	3.9		
7			3.0	28	5.6	6.7	.09	.05	.27	4.2		
8			3.0	21	5.0	5.9	.08	.06	.30	5.8		
9			7.0	17	4.8	4.4	.07	.04	.12	5.5		
10			40	17	5.1	4.2	.07	.04	.08	4.7		
11			80	17	5.7	4.2	.07	.06	.11	6.7		
12			90	16	5.7	3.4	.08	.07	.17	9.4		
13			100	14	6.3	2.7	.06	.05	.24	9.4		
14			140	13	7.6	2.2	.05	.04	.92	10		
15			130	12	7.5	1.7	.04	.05	.88	11		
16			150	12	7.2	1.2	.04	.10	.80	10		
17			160	12	7.1	.77	.09	.07	.71	9.1		
18			171	11	6.3	.51	.13	.08	1.1	7.9		
19			166	13	5.2	.39	.11	.07	1.6	7.4		
20			177	19	4.4	.30	.04	.05	1.6	6.9		
21			141	18	3.8	.28	.07	.06	1.8	6.5		
22			100	15	3.4	.25	.05	.05	1.9	6.3		
23			62	13	3.0	.23	.13	.06	2.0	6.1		
24			53	14	2.7	.23	.29	.06	2.1	5.5		
25			46	15	3.4	.17	.08	.05	2.0	5.2		
26			35	14	3.8	.16	.06	.03	2.2	5.0		
27			26	13	3.8	.17	.07	.02	2.0	4.8		
28			20	11	4.4	.15	.06	.04	2.0	4.9		
29			18	11	4.3	.16	.07	.04	2.0	4.8		
30			16	10	6.0	.16	.07	.04	2.0	4.8		
31			22	---	13	---	.06	.04	--	4.8		
TOTAL			2123.0	512	181.9	113.73	2.81	1.68	29.12	186.7		
MEAN			68.6	17.1	5.87	3.79	.09	.05	.97	6.02		
MAX			177	37	13	16	.29	.10	2.2	11		
MIN			3.0	10	2.7	15	.04	.02	.03	2.0		
AC-FT			4210	1020	361	226	5.6	3.3	58	370		

POPULAR RIVER BASIN

POPULAR RIVER AT LITTLE ROCK

STATION NO. 111
GAGE NO. 111

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2.5	2.4	3.4	3.5	5.0	6.5	2.6	2.5	2.6	2.8	3.0	2.5
2	2.6	2.3	3.1	3.9	5.0	4.7	2.6	3.0	2.6	3.0	3.1	2.5
3	2.8	2.2	2.6	3.6	5.1	4.3	2.5	3.1	2.6	3.3	3.0	2.4
4	2.9	2.2	2.4	3.4	5.5	3.8	2.4	2.9	2.7	3.3	3.0	2.6
5	2.8	2.0	2.3	3.4	5.9	3.5	2.4	2.7	2.9	2.9	3.3	2.6
6	2.9	2.0	2.4	3.4	5.7	3.4	2.4	2.5	3.0	2.9	3.0	2.7
7	2.9	2.0	2.5	3.4	5.0	3.1	2.4	2.4	3.5	3.2	3.0	2.8
8	2.7	1.9	2.6	3.2	5.2	3.7	2.4	2.6	3.3	3.2	2.9	2.9
9	2.8	1.9	2.8	3.1	5.0	3.3	2.2	2.5	3.1	3.2	2.8	2.8
10	2.7	1.9	2.9	3.1	7.8	3.2	2.3	2.4	3.0	3.2	2.7	2.8
11	2.4	1.9	3.0	3.1	10	3.2	2.3	2.5	2.9	3.2	2.7	2.6
12	2.7	1.8	3.0	3.2	12	2.9	2.3	2.9	2.8	3.4	2.8	2.6
13	2.8	2.0	3.2	3.1	13	3.0	2.3	3.0	3.2	3.4	2.9	2.3
14	2.9	2.1	3.3	3.1	8.7	3.0	2.3	2.7	3.0	3.5	2.9	2.6
15	2.9	2.3	3.2	3.1	8.8	2.8	2.2	2.8	3.0	3.4	2.9	2.6
16	2.9	2.4	3.2	2.8	8.2	3.3	2.3	3.2	2.8	3.4	2.9	2.7
17	3.0	2.4	3.4	3.1	8.2	3.3	2.2	3.4	2.9	3.3	2.8	2.7
18	2.9	2.3	3.6	3.1	8.2	2.8	2.6	3.0	2.9	3.2	2.7	2.7
19	2.8	2.4	3.4	3.4	8.0	2.7	2.5	2.8	3.1	3.1	2.7	2.8
20	2.7	2.5	3.3	4.3	7.9	2.8	2.4	2.7	2.9	3.1	2.5	2.8
21	2.7	2.6	3.3	3.7	8.1	2.7	2.3	3.1	3.0	3.0	2.6	2.9
22	2.7	2.7	3.1	3.3	8.0	2.5	2.3	3.0	3.2	3.0	2.6	2.9
23	2.8	2.7	3.1	3.1	8.1	2.5	2.4	3.0	3.0	3.0	2.4	3.0
24	2.9	4.0	3.3	3.8	8.2	2.6	2.5	2.9	2.9	2.9	2.3	2.8
25	2.9	6.7	3.4	4.6	11	2.7	3.0	2.7	3.0	3.1	2.4	2.8
26	2.9	3.8	3.1	5.1	8.6	2.6	2.7	2.7	3.1	3.2	2.4	3.3
27	2.9	2.9	2.8	5.4	8.7	2.5	2.6	2.5	3.0	2.9	2.3	3.0
28	2.9	3.2	3.0	5.2	8.9	2.6	2.4	2.7	2.7	3.2	2.2	2.9
29	2.7	---	2.9	5.2	8.3	2.6	2.4	2.9	2.7	2.8	2.2	2.9
30	2.6	---	2.9	5.0	12	2.7	2.5	2.8	2.8	3.0	2.3	2.9
31	2.5	---	3.1	---	10	---	2.4	2.8	---	3.1	---	2.8
TOTAL	86.1	71.5	93.6	110.7	248.1	95.3	75.1	86.7	88.2	97.2	81.3	85.2
MEAN	2.78	2.55	3.02	3.69	8.00	3.18	2.42	2.80	2.94	3.14	2.71	2.75
MAX	3.0	6.7	3.6	5.4	13	6.5	3.0	3.4	3.5	3.5	3.3	3.3
MIN	2.4	1.8	2.3	2.8	5.0	2.5	2.2	2.4	2.6	2.8	2.2	2.3
AC-FT	171	142	186	220	492	189	149	172	175	193	161	169

SURFACE WATER QUALITY MONITORING

Station Location

Responsible Agency: U.S. Geological Survey

<u>No. on</u> <u>Map</u>	<u>USGS</u> <u>Station</u> <u>No.</u>	<u>Station Name</u>
1	06178000	Poplar River at International Boundary
2	06178500	East Poplar River at International Boundary
3	06179000	East Poplar River near Scobey

PARAMETERS

WATSTORE*

Sampling Frequency

<u>Code</u>	<u>Parameter</u>	<u>Analytical</u> <u>method</u>	<u>No.</u>	<u>1</u>	<u>2</u>	<u>3</u>
00410	Alkalinity-field	Elect. Titration	M	M	M	
90410	Alkalinity-lab	Elect. Titration	M	M	M	
01106	Aluminum-diss	AA	SA	SA	SA	
00610	Ammonie-tot	Colorimetric	M	M	M	
00625	Ammonie+Org N-tot	Colorimetric	M	M	M	
01000	Arsenic-diss	AA, hydride	SA	SA	SA	
01002	Arsenic-tot	AA, hydride	A	A	A	
01010	Beryllium-diss	AA	SA	SA	SA	
01012	Beryllium-tot/rec	AA-persulfate	A	A	A	
01020	Boron-diss	Colorimetric	M	M	M	
01025	Cadmium-diss	AA	SA	SA	SA	
01027	Cadmium-tot/rec	AA-persulfate	A	A	A	
00915	Calcium	AA	M	M	M	
00680	Carbon-tot Org	Wet Oxidation	SA	SA	SA	
00940	Chloride-diss	Ion chromatography	M	M	M	
01030	Chromium-diss	AA	SA	SA	SA	
01034	Chromium-tot/rec	AA-persulfate	A	A	A	
00080	Color	Electrometric, visual	M	M	M	
00095	Conductivity	Wheatstone Bridge	M	D	M	
01040	Copper-diss	AA	SA	SA	SA	
01042	Copper-tot/rec	AA-persulfate	A	A	A	
00061	Discharge-inst	Direct measur.	M	M	M	
00950	Fluoride	Electrometric	M	M	M	
01046	Iron-diss	AA	M	M	M	
01045	Iron-tot/rec	AA-persulfate	A	A	A	
01049	Lead-diss	AA	SA	SA	SA	
01051	Lead-tot/rec	AA-persulfate	A	A	A	
00925	Magnesium-diss	AA	M	M	M	
01056	Manganese-diss	AA	SA	SA	SA	
01055	Manganese-tot/rec	AA-persulfate	A	A	A	
01065	Nickel-diss	AA	SA	SA	SA	
01067	Nickel tot/rec	AA-persulfate	A	A	A	
00615	Nitrite-tot	Ion-chromatography	M	M	M	
00630	Nitrate+Nitrite-tot	Colorimetric	M	M	M	
00300	Oxygen-diss	Winkler/meter	M	M	M	
70507	Phos, Ortho-tot	Colorimetric	M	M	M	
00400	pH	Electrometric	M	N	M	
00665	Phosphorous-tot	Colorimetric	M	N	M	
00935	Potassium-diss	AA	M	M	M	
00931	SAR	Calculated	M	M	M	
80154	Sediment-conc.	Filtration-gravimetric	M	M	M	
80155	Sediment-load	Calculated	M	M	M	
01145	Selenium-diss	AA, hydride	SA	SA	SA	
01147	Selenium tot/rec	AA, hydride	A	A	A	
00955	Silica	Colorimetric	M	M	M	
00930	Sodium	AA	M	M	M	
00945	Sulfate-diss	Colorimetric	M	M	M	
70301	Total Dissolved Solids	Calculated	M	M	M	
00010	Temp Water	Toluana	M	M	M	
00020	Temp Air	Toluene	M	N	M	
00076	Turbidity	Nephelometric	M	M	M	
80020	Uranium-diss	Fluorimetric	-	MC	-	
01090	Zinc-diss	AA	SA	SA	SA	
01092	Zinc-tot/rec	AA-persulfate	A	A	A	

*Computer storage and retrieval system - USGS

Symbols: C-continuous; D-daily; M-monthly; MC-monthly composite; A-annually at high flow; SA-semi-annually at low and high flow; AA-atomic absorption; tot-total; rec-recoverable; diss-dissolved



SURFACE WATER QUALITY MONITORING STATIONS

POPLAR RIVER BASIN

081 4000 POPLAR RIVER AT INTERNATIONAL 000000

WATER QUALITY DATA

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE, AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	CLOUD COVER (PER- CENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WEATHER (WMO CODE NUMBER) (00041)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)
MAR , 1985									
20...	1700	4.0	13.5	693	0	E.0	.00	241	13
APR									
09...	1510	10.5	20.0	695	0	E.0	.00	18	--
MAY									
15...	1100	14.0	15.0	701	0	E4.0	.00	7.5	2.5
JUN									
11...	1615	16.5	16.5	705	70	E7.0	1	4.1	3.3
JUL									
17...	1130	20.0	24.0	700	80	E7.0	1	.15	3.4
AUG									
16...	1030	11.5	9.0	699	--	E.0	63	.12	3.2
SEP									
11...	1315	11.0	14.0	704	80	E13.0	3	.13	6.3
OCT									
18...	1000	4.5	7.0	705	0	E.0	.00	8.1	5.0
NOV									
19...	1000	.0	-19.0	708	100	E7.0	3	1.6	6.0

DATE	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH (STAND- ARD UNITS) (00400)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LINITY FIELD (MG/L AS CaCO3) (00410)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
MAR , 1985									
20...	70	336	6.6	55	7.8	3.9	128	1.6	.100
APR									
09...	--	689	10.4	103	8.0	4.3	222	1.3	.020
MAY									
15...	30	1,240	8.6	91	8.4	3.0	392	.75	.050
JUN									
11...	45	1,320	13.6	151	8.6	2.4	511	.93	.070
JUL									
17...	60	1,820	5.2	63	9.2	.5	464	1.1	.070
AUG									
16...	55	2,000	8.4	85	8.8	.6	--	1.1	.060
SEP									
11...	100	1,820	8.7	86	8.4	3.9	512	1.6	.060
OCT									
18...	40	762	10.0	84	8.5	2.7	--	.68	.120
NOV									
19...	25	1,330	7.8	58	8.1	8.1	--	.34	.060

POPLAR RIVER BASIN

WATER QUALITY DATA

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	HARD- NESS, (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
MAR , 1985									
20...	.020	1.7	.20	.200	16	120	0	23	15
APR									
09...	<.010	1.3	<.10	.050	--	230	9	43	30
MAY									
15...	<.010	.80	<.10	.030	--	310	0	42	49
JUN									
11...	<.010	1.0	<.10	.020	--	290	0	27	53
JUL									
17...	<.010	1.2	<.10	.060	13	250	0	15	51
AUG									
16...	<.010	1.2	<.10	.030	--	280	0	27	52
SEP									
11...	<.010	1.7	<.10	.060	--	330	0	43	54
OCT									
18...	<.010	.80	<.10	.020	--	310	0	49	45
NOV									
19...	<.010	.40	<.10	.020	--	380	0	63	54

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
MAR , 1985									
20...	29	1	33	8.9	2.6	40	.20	9.3	2
APR									
09...	66	2	37	7.6	3.6	96	.30	10	--
MAY									
15...	170	4	54	7.1	6.2	200	.40	6.8	--
JUN									
11...	210	5	61	7.9	5.8	230	.40	.6	--
JUL									
17...	380	11	76	9.3	12	400	.60	.4	7
AUG									
16...	370	10	73	8.4	12	450	.60	.9	--
SEP									
11...	320	8	67	9.7	13	340	.40	9.1	--
OCT									
18...	160	4	52	8.1	6.1	180	.40	8.7	--
NOV									
19...	160	4	47	7.7	6.8	190	.50	14	--

POPLAR RIVER BASIN

DA178000 POPULAR RIVER INTERNATIONAL MEASUREMENTS OF TOXIC SUBSTANCES

QUALITY DATA

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
MAR , 1985									
20...	2	<.5	10	200	1	<1	<10	20	3
APR									
09...	--	--	--	390	--	--	--	--	--
MAY									
15...	--	--	--	960	--	--	--	--	--
JUN									
11...	--	--	--	1,200	--	--	--	--	--
JUL									
17...	--	<.5	--	2,000	<1	--	<10	--	<1
AUG									
16...	--	--	--	1,900	--	--	--	--	--
SEP									
11...	--	--	--	2,200	--	--	--	--	--
OCT									
18...	--	--	--	990	--	--	--	--	--
NOV									
19...	--	--	--	1,100	--	--	--	--	--
DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
MAR , 1985									
20...	7	710	150	<1	<1	70	37	3	5
APR									
09...	--	--	76	--	--	--	--	--	--
MAY									
15...	--	--	44	--	--	--	--	--	--
JUN									
11...	--	--	30	--	--	--	--	--	--
JUL									
17...	--	--	42	<1	--	--	12	2	--
AUG									
16...	--	--	44	--	--	--	--	--	--
SEP									
11...	--	--	130	--	--	--	--	--	--
OCT									
18...	--	--	39	--	--	--	--	--	--
NOV									
19...	--	--	15	--	--	--	--	--	--

POPLAR RIVER BASIN

GROUNDWATER QUALITY DATA

DATE

DATE	ZINC, DISSOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ALUM- INUM, DISSOLVED (UG/L AS AL) (01106)	SELE- NIUM, DISSOLVED (UG/L AS SE) (01145)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
MAR , 1985								
20...	13	<10	90	<1	<1	210	134	.28
APR								
09...	--	--	--	--	--	390	19	.53
MAY								
15...	--	--	--	--	--	720	15	.97
JUN								
11...	--	--	--	--	--	840	9.3	1.1
JUL								
17...	8	--	<10	<1	--	1,100	.47	1.6
AUG								
16...	--	--	--	--	--	970	.32	1.3
SEP								
11...	--	--	--	--	--	1,100	.39	1.5
OCT								
18...	--	--	--	--	--	730	16	.99
NOV								
19...	--	--	--	--	--	830	3.6	1.1

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, TOTAL (MG/L AS PO4) (71886)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LA8 (US/CM) (90095)	ALKA- LINEITY LA8 (MG/L AS CAC03) (90410)	HARD- NESS NONCAR- BONATE (MG/L AS CAC03) (95902)
MAR , 1985								
20...	99	.090	--	47	31	351	136	0
APR								
09...	--	.010	--	--	--	661	261	9
MAY								
15...	94	<.010	--	63	1.3	1,220	419	0
JUN								
11...	79	.020	.06	61	.68	1,360	499	0
JUL								
17...	35	<.010	.18	29	.01	1,890	609	0
AUG								
16...	76	<.010	.09	13	<.01	1,990	610	0
SEP								
11...	74	.010	.18	48	.02	1,800	605	0
OCT								
18...	--	.020	.06	--	--	1,160	448	0
NOV								
19...	--	.020	.06	--	--	1,340	558	0

POPLAR RIVER BASIN

WATER QUALITY DATA AT INTERNATIONAL BRIDGE

WATER QUALITY DATA

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE, AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	CLOUD COVER (PER- CENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WEATHER (WMO CODE NUMBER) (00041)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)	COLOR (PLAT- INUM- COBALT UNITS (00080)
JAN , 1985										
15...	1000	.0	-10.0	692	75	E.0	1	2.8	--	--
FEB										
13...	1230	.0	-7.0	706	0	E10	.00	3.0	1.2	5
MAR										
14...	1130	.0	1.0	700	0	E8.0	.00	2.9	3.0	35
APR										
17...	0900	10.0	15.0	690	0	E.0	.00	3.2	6.5	20
MAY										
14...	1445	13.0	18.0	696	0	E.0	.00	9.2	5.5	25
JUN										
11...	1055	14.0	24.0	707	75	E12.0	2	4.1	4.6	--
11...	1100	14.0	24.0	707	75	E12.0	2	4.1	4.1	20
11...	1105	14.0	24.0	707	75	E12.0	2	4.1	4.4	20
JUL										
17...	0930	20.0	20.0	700	80	E7.0	1	2.2	3.9	25
AUG										
15...	1430	15.5	15.0	699	100	E.0	62	1.9	2.8	20
SEP										
12...	0830	12.5	14.5	699	100	E15.0	51	2.4	4.5	25
OCT										
17...	1400	7.0	11.5	696	0	--	.00	2.5	20	10
NOV										
18...	1300	.0	-15.0	706	100	E11.0	3	2.3	2.0	7

DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LINITY FIELD (MG/L AS CACO3) (00410)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
JAN , 1985										
15...	1,470	5.4	41	7.7	7.6	22	575	--	.36	.840
FEB										
13...	1,500	5.4	40	7.5	7.3	40	650	1.5	.20	1.20
MAR										
14...	1,290	9.6	72	7.8	7.9	16	526	1.1	.42	.580
APR										
17...	1,500	8.2	81	8.1	8.3	9.0	590	--	--	.040
MAY										
14...	1,280	9.1	95	8.3	8.5	3.8	394	--	1.5	.120
JUN										
11...	1,470	11.3	119	8.5	8.4	2.9	--	--	.66	.040
11...	1,470	11.3	119	8.5	8.4	2.8	--	--	.56	.040
11...	1,470	11.3	119	8.5	8.4	2.8	--	--	.55	.050
JUL										
17...	1,400	5.0	60	8.1	8.0	7.2	469	--	.87	.130
AUG										
15...	1,400	8.0	88	8.4	8.4	3.5	458	--	.58	.120
SEP										
12...	1,500	7.4	76	8.2	8.3	5.4	444	--	.73	.070
OCT										
17...	1,500	7.0	63	8.3	8.1	4.8	--	.90	.53	.270
NOV										
18	1,220	6.7	50	7.6	7.7	29	--	1.1	.18	.820

[illegible]

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	HARD- NESS (MG/L AS CaCO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)
AUG 1985											
15...	<.010	--	1.2	<.10	.020	--	390	0	79	47	190
FEB											
13...	<.010	--	1.4	.10	<.010	--	410	0	87	46	170
APR											
16...	<.010	--	1.0	.10	.010	--	350	0	68	43	170
MAY											
17...	<.010	--	.80	<.10	.040	--	390	0	70	52	210
JUN											
19...	.020	--	1.6	<.10	.040	--	310	0	48	46	180
JUL											
11...	<.010	--	.70	<.10	.030	5.6	360	0	57	54	220
11...	<.010	--	.60	<.10	.030	8.2	350	0	54	53	210
11...	<.010	--	.60	<.10	.030	5.4	350	0	54	53	210
JUL											
17...	<.010	--	1.0	<.10	.030	--	340	0	51	51	210
AUG											
15...	<.010	--	.70	<.10	.020	--	350	0	56	51	200
SEP											
12...	<.010	--	.80	<.10	.020	5.7	380	0	69	50	200
OCT											
17...	.020	.08	.80	.10	.010	--	410	0	77	52	200
NOV											
18...	.010	.09	1.0	.10	.020	--	420	0	86	49	200

DATE	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLOO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)
	(00931)	(00932)	(00935)	(00940)	(00945)	(00950)	(00955)	(01000)	(01001)	(01002)	(01010)
JAN . 1985											
15...	4	51	7.0	6.2	280	.30	15	--	--	--	--
FEB											
13...	4	47	7.4	5.8	270	.30	14	--	--	--	--
MAR											
14...	4	51	7.4	5.7	260	.30	13	--	--	--	--
APR											
17...	5	53	7.9	6.4	290	.30	8.7	--	--	--	--
MAY											
14...	5	55	13	6.3	240	.30	4.5	--	--	--	--
JUN											
11...	5	56	7.1	5.7	310	.30	11	5	1	6	<.5
11...	5	56	8.3	5.9	310	.30	11	5	--	--	--
11..	5	56	10	5.9	310	.30	11	5	--	--	--
JUL											
17...	5	57	4.6	6.9	290	.30	9.9	--	--	--	--
AUG											
15...	5	55	7.2	5.6	290	.30	8.0	--	--	--	--
SEP											
12...	5	53	7.7	6.2	280	.30	11	2	--	--	<.5
OCT											
17...	4	51	8.0	6.6	300	.30	10	--	--	--	--
NOV											
18...	4	51	7.6	6.1	280	.40	15	--	--	--	--

06178500 EAST POPLAR RIVER AT INTERNATIONAL BOUNDARY--Continued

BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE) (01012)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU) (01040)	COPPER, PENDE TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, SUS- PENDE TOTAL RECOV- ERABLE (UG/L AS FE) (01044)
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[illegible][illegible]

POPLAR RIVER BASIN

(017850)

POPLAR RIVER AT INTERNATIONAL BOUNDARY-10

10000

QUALITY DATA

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN , 1985								
15...	--	--	--	--	970	7.3	1.3	69
FEB								
13...	--	--	--	--	990	8.0	1.3	61
MAR								
14...	--	--	--	--	880	6.9	1.2	69
APR								
17...	--	--	--	--	1,000	8.6	1.4	47
MAY								
14...	--	--	--	--	780	19	1.1	74
JUN								
11...	<10	--	<1	<1	950	11	1.3	--
11...	<10	<10	<1	--	930	10	1.3	78
11...	<10	<10	<1	--	940	10	1.3	--
JUL								
17...	--	--	--	--	910	5.4	1.2	62
AUG								
15...	--	--	--	--	890	4.6	1.2	79
SEP								
12...	--	<10	<1	--	890	5.7	1.2	70
OCT								
17...	--	--	--	--	950	6.4	1.3	--
NOV								
18...	--	--	--	--	1,000	6.2	1.4	--

DATE	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOS- PHORUS TOTAL (MG/L AS PO4) (71886)	NITRO- GEN, TOTAL (MG/L AS NO3) (71887)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINIT LAB (MG/L AS CAO3) (90410)	HARD- NESS NONCAR- BONATE (MG/L AS CAO3) (95902)
JAN , 1985								
15...	<.010	--	--	18	.14	1,470	547	0
FEB								
13...	<.010	--	6.6	19	.15	1,460	495	0
MAR								
14...	<.010	--	4.9	59	.46	1,280	467	0
APR								
17...	.010	--	--	132	1.1	1,480	503	--
MAY								
14...	<.010	--	--	116	2.9	1,310	455	0
JUN								
11...	<.010	.09	--	--	--	1,450	473	0
11...	<.010	.09	--	72	.80	1,450	459	0
11...	<.010	.09	--	--	--	1,450	472	0
JUL								
17...	<.010	.09	--	67	.40	1,460	469	0
AUG								
15...	<.010	.06	--	38	.19	1,410	448	0
SEP								
12...	<.010	.06	--	41	.26	1,480	508	0
OCT								
18...	.010	.03	4.0	--	--	1,510	498	0
NOV								
18...	.030	.06	4.9	--	--	1,600	588	0

10000 AIR BASIN
SURFACE WATER TEMPERATURE (°F) OF DAY
10000 AIR BASIN
SURFACE WATER TEMPERATURE (°F) OF DAY

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1320	1470	1350	1360	1390	1390	1400	1450	1370	1400	1400	1560
2	1370	1480	1180	1230	1380	1420	1410	1390	1390	1410	1420	1520
3	1340	1470	1270	1160	1400	1410	1420	1390	1390	1400	1400	1520
4	1350	1450	1380	1210	1400	1440	1430	1380	1400	1390	1400	1440
5	1270	1450	1430	1310	1380	1470	1440	1380	1400	1390	1410	1470
6	1350	1440	1400	1360	1380	1470	1440	1390	1400	1400	1430	1470
7	1340	1440	1400	1380	1340	1460	1430	1400	1380	1430	1440	1440
8	1330	1440	1330	1380	1320	1470	1450	1420	1340	1410	1490	1430
9	1390	1430	1310	1370	1340	1480	1450	1430	1370	1400	1550	1420
10	1390	1420	1290	1360	1360	1420	1440	1430	1380	1410	1620	1410
11	1380	1430	1360	1360	1340	1400	1430	1410	1410	1430	1680	1450
12	1430	1440	1340	1400	1310	1400	1420	1400	1400	1410	1660	1490
13	1390	1440	1320	1420	1270	1350	1430	1370	1410	1420	1620	1530
14	1370	1440	1300	1440	1280	1360	1420	1360	1410	1400	1590	1560
15	1390	1440	1290	1420	1280	1390	1410	1370	1410	1420	1560	1520
16	1360	1420	1290	1430	1280	1390	1410	1370	1420	1460	1530	1510
17	1370	1410	1270	1440	1280	1410	1410	1390	1440	1460	1470	1460
18	1370	1460	1170	1440	1270	1400	1410	1390	1440	1470	1560	1450
19	1580	1440	1170	1440	1280	1390	1410	1390	1440	1470	1600	1470
20	1520	1430	1160	1490	1280	1360	1400	1360	1410	1480	1640	1470
21	1540	1430	1140	1560	1270	1350	1410	1380	1420	1500	1700	1450
22	1480	1430	1110	1620	1270	1410	1400	1400	1400	1500	1750	1450
23	1440	1370	1210	1630	1260	1400	1400	1390	1390	1500	1750	1450
24	1440	1400	1380	1600	1270	1410	1410	1400	1390	1470	1770	1440
25	1410	770	1390	1580	1260	1390	1390	1400	1400	1470	1780	1470
26	1420	805	1310	1560	1320	1390	1390	1400	1410	1470	1770	1500
27	1440	1310	1260	1560	1360	1390	1380	1420	1400	1470	1760	1480
28	1430	1440	1280	1480	1290	1390	1390	1410	1400	1480	1750	1470
29	1430	---	1340	1430	1300	1400	1390	1410	1400	1470	1750	1520
30	1470	---	1400	1430	1280	1420	1400	1420	1420	1460	1740	1530
31	1560	---	1420	---	1360	---	1420	1410	---	1460	---	1520

POPLAR RIVER BASIN

U6179000 EAST FORK POPLAR RIVER NEAR SCOBEE, MT.

WATER QUALITY DATA

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE, AIR (DEG C) (00020)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	CLOUD COVER (PER- CENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WEATHER (WMO CODE NUMBER) (00041)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)
JAN, 1985									
15...	1230	.0	.0	694	100	E.0	3	.50	--
MAR									
14...	0915	.0	.0	703	0	E.0	.00	6.3	6.2
APR									
17...	1045	9.5	19.0	691	0	E.0	.00	6.5	3.4
MAY									
14...	1630	16.0	22.0	698	0	E.0	.00	12	5.4
JUN									
12...	1515	16.0	21.0	700	50	E12.0	1	2.7	5.0
JUL									
16...	1600	23.0	26.0	702	0	E3.0	.00	.30	4.3
AUG									
15...	1600	15.0	14.0	700	100	E.0	62	2.5	2.8
SEP									
11...	1530	12.0	15.0	706	80	E15.0	3	3.5	4.1
OCT									
17...	1600	7.5	12.0	699	0	E7.0	.00	4.5	9.0
NOV									
18...	1500	.0	-15.0	707	100	E10.0	3	2.1	2.7

DATE	COLOR (PLAT- INUM- COBALT UNITS) (00080)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALKA- LITY FIELD (MG/L AS CaCO3) (00410)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AMMONI- TOTAL (MG/L AS N) (00610)
JAN, 1985										
15...	--	3,100	1.0	8	7.8	7.7	28	907	.68	.520
MAR										
14...	60	852	6.7	50	7.7	7.8	13	343	.90	.100
APR										
17...	25	872	10.2	99	8.1	8.4	5.1	333	.81	.290
MAY										
14...	40	1,620	9.0	100	8.5	8.6	2.7	440	1.2	.070
JUN										
12...	30	740	10.6	117	8.9	8.9	1.0	445	.93	.070
JUL										
16...	40	1,660	10.4	133	9.2	9.4	.4	376	1.3	.070
AUG										
15...	65	1,820	6.4	70	9.2	9.2	.6	486	1.9	.050
SEP										
11...	45	1,550	9.6	97	9.1	9.1	.6	421	1.3	.050
OCT										
17...	30	1,380	11.7	107	8.8	8.7	1.4	--	.52	.080
NOV										
18...	20	1,940	10.5	78	8.4	8.3	4.6	--	.56	.040

POPLAR RIVER BASIN

06179000 EAST FORK POPLAR RIVER NEAR SCORBY, MT. -- Continued

WATER QUALITY DATA

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3) (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
JAN , 1985									
15...	<.010	1.2	<.10	.030	--	780	0	130	110
MAR									
14...	.030	1.0	.30	.050	--	240	0	47	29
APR									
17...	<.010	1.1	<.10	.030	6.6	210	0	36	29
MAY									
14...	<.010	1.3	<.10	.080	--	340	0	43	57
JUN									
12...	<.010	1.0	<.10	.020	--	280	0	25	52
JUL									
16...	<.010	1.4	<.10	.060	--	290	0	16	61
AUG									
15...	<.010	1.9	<.10	.040	--	280	0	18	57
SEP									
11...	<.010	1.3	<.10	.030	11	290	0	21	57
OCT									
17...	<.010	.60	<.10	.020	--	300	0	34	52
NOV									
18...	<.010	.60	<.10	.020	--	380	0	49	63
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	PERCENT SODIUM (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
JAN , 1985									
15...	460	7	56	16	14	580	.40	24	--
MAR									
14...	110	3	49	8.3	4.8	160	.20	11	--
APR									
17...	120	4	55	5.6	4.5	160	.20	4.0	<1
MAY									
14...	260	6	62	9.0	8.8	350	.30	8.2	--
JUN									
12...	230	6	63	11	6.8	290	.30	.9	--
JUL									
16...	290	7	67	13	9.7	360	.40	5.1	--
AUG									
15...	310	8	70	10	9.5	420	.40	2.1	--
SEP									
11...	250	6	65	8.2	7.7	310	.30	1.3	6
OCT									
17...	220	6	61	7.4	12	320	.30	3.0	--
NOV									
18...	270	6	60	9.5	11	360	.40	2.6	--

POPLAR RIVER BASIN

06179000 AS1 FORK POPLAR RIVER NEAR SCOBEE, MI. -Continued

WATER QUALITY DATA

DATE	ARSENIC TOTAL (UC/L AS AS) (01002)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BERYL- LIUM, TOTAL RECOV- ERABLE (UC/L AS BE) (01012)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, DIS- SOLVED (UC/L AS CU) (01040)
JAN , 1985									
15...	--	--	--	3,600	--	--	--	--	--
MAR									
14...	--	--	--	B50	--	--	--	--	--
APR									
17...	2	<.5	<10	B10	<1	<1	10	40	1
MAY									
14...	--	--	--	2,000	--	--	--	--	--
JUN									
12...	--	--	--	1,600	--	--	--	--	--
JUL									
16...	--	--	--	2,100	--	--	--	--	--
AUG									
15...	--	--	--	2,400	--	--	--	--	--
SEP									
11...	--	<.5	--	2,200	<1	--	<10	--	1
OCT									
17...	--	--	--	1,800	--	--	--	--	--
NOV									
18...	--	--	--	2,200	--	--	--	--	--

DATE	COPPER, TOTAL RECOV- ERABLE (UC/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UC/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV- ERABLE (UC/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANCA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)
JAN , 1985									
15...	--	--	70	--	--	--	--	--	--
MAR									
14...	--	--	100	--	--	--	--	--	--
APR									
17...	7	360	51	<1	<1	40	19	3	1
MAY									
14...	--	--	21	--	--	--	--	--	--
JUN									
12...	--	--	37	--	--	--	--	--	--
JUL									
16...	--	--	43	--	--	--	--	--	--
AUG									
15...	--	--	58	--	--	--	--	--	--
SEP									
11...	--	--	33	1	--	--	10	<1	--
OCT									
17...	--	--	13	--	--	--	--	--	--
NOV									
18...	--	--	18	--	--	--	--	--	--

POPLAR RIVER BASIN

06179000 EAST FORK POPLAR RIVER NEAR SCOBEE, MISS.-Continued

QUALITY DATA

DATE	ZINC, DIS- SOLVED (0G/L AS ZN) (01090)	ZINC, TOTAL, RECOV- ERABLE (UG/L AS ZN) (01092)	ALOM- INUM, DIS- SOLVED (0G/L AS AL) (01106)	SELE- NIUM, DIS- SOLVED (0G/L AS SE) (01145)	SELE- NIUM, TOTAL (0G/L AS SE) (01147)	SOLIDS, SUM OF CONSTI- TOENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)
JAN , 1985							
15...	--	--	--	--	--	1,900	2.5
MAR							
14...	--	--	--	--	--	580	9.8
APR							
17...	4	<10	10	<1	<1	560	9.8
MAY							
14...	--	--	--	--	--	1,000	32
JUN							
12...	--	--	--	--	--	880	6.4
JUL							
16...	--	--	--	--	--	980	.80
AUG							
15...	--	--	--	--	--	1,100	7.6
SEP							
11...	10	--	<10	<1	--	910	8.5
OCT							
17...	--	--	--	--	--	940	11
NOV							
18...	--	--	--	--	--	1,100	6.4

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SED. SOSP. SIEVE DIAM. %FINER THAN .062 MM (70331)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOS- PHORUS, TOTAL (MG/L AS PO4) (71886)	SED1- MENT, SUS- PENDE (MG/L) (80154)	SED1- MENT, DIS- CHARGE, SOS- PENDE (T/DAY) (80155)	SPE- CIFIC CON- DOC- TANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	HARD- NESS NONCAR- BONATE (MG/L AS CACO3) (95902)
JAN , 1985									
15...	2.5	54	.010	--	84	.11	2,860	820	0
MAR									
14...	.78	--	.020	--	--	--	886	318	0
APR									
17...	.76	50	.010	--	71	1.2	841	280	0
MAY									
14...	1.4	70	<.010	--	96	3.1	1,660	534	0
JUN									
12...	1.2	68	<.010	.06	46	.34	1,410	447	0
JUL									
16...	1.3	29	<.010	.18	55	.04	1,670	544	0
AUG									
15...	1.5	47	<.010	.12	11	.07	1,800	543	0
SEP									
11...	1.2	75	<.010	.09	13	12	1,540	498	0
OCT									
17...	1.3	--	.010	.06	--	--	1,480	478	0
NOV									
18...	1.5	--	.010	.06	--	--	1,810	598	0

GROUND WATER LEVELS TO MONITOR

POTENTIAL DRAWDOWN DUE TO

COAL SEAM DEWATERING

Responsible Agency: Montana Bureau of Mines and Geology

No. on Map

2 to 22

Sampling

Determine water levels
quarterly



GROUND WATER PIEZOMETERS TO MONITOR POTENTIAL
DRAWDOWN DUE TO COAL SEAM DEWATERING

Ground-water level measurements

Well no.	Depth to water (feet)			
	March 14, 1985	May 25, 1985	Aug. 20 1985	Nov. 25 1985
2	217.99	--	218.0	--
3	81.75	81.72	81.94	81.80
4	60.80	60.74	60.72	60.71
5	21.02	20.83	20.76	20.64
6	21.53	21.30	21.22	21.13
7	78.96	77.75	78.52	78.87
8	13.48	14.03	14.47	14.07
9	14.07	14.51	15.01	14.61
10	6.22	5.95	6.44	6.26
11	---	-0.85	-0.9	--
12	dry	dry	dry	dry
13	134.99	135.73	135.07	135.07
14	211.87	212.48	212.58	212.11
15	224.56	229.07	224.72	224.76
16	31.59	31.75	---	41.45
17	247.78	247.93	248.15	247.87
18	215.28	214.47	---	247.79
19	126.11	126.23	126.35	126.30
20	dry	0	dry	dry
21	---	242.23	240.88	240.67
22	18.86	18.49	18.29	18.14

